

1. Six players (A, B, C, D, E, F) play a round-robin chess tournament (each plays every other exactly once). No match ends in a draw. If A wins 4 matches, B wins 3 matches, and C wins 2 matches, then the total number of matches won by all players together is:

- a) 10
- b) 12
- c) 15
- d) 30

Answer: c) 15

Explanation: In a round-robin among 6 players, total matches = $6C2 = 15$. Each match has one winner. Hence, total wins = 15.

2. In a badminton tournament of 5 players (P, Q, R, S, T), each plays once against every other. If no draws are allowed, how many matches are played in total?

- a) 5
- b) 8
- c) 10
- d) 12

Answer: c) 10

Explanation: Total matches = $5C2 = 10$.

3. In a group of 7 players, each player plays against every other player exactly once. The maximum number of matches won by a single player is:

- a) 5
- b) 6
- c) 7
- d) Cannot be determined

Answer: b) 6

Explanation: Each player plays 6 matches. So maximum wins possible = 6.

4. In a football tournament with 8 teams, each team plays against every other team exactly once. What is the total number of matches played?

- a) 28
- b) 30

- c) 32
- d) 36

Answer: a) 28

Explanation: Total matches = $8C2 = 28$.

5. In a round-robin tournament of 4 players (W, X, Y, Z), each plays each other once. If W wins all matches, X defeats Y and Z, and Y defeats Z, who is the second-highest in ranking?

- a) W
- b) X
- c) Y
- d) Z

Answer: b) X

Explanation: Results: W = 3 wins, X = 2 wins, Y = 1 win, Z = 0 wins. Ranking: $W > X > Y > Z$. So second-highest = X.

6. In a cricket tournament of 6 teams, each team plays every other team once. If there are no ties, how many matches are played?

- a) 10
- b) 12
- c) 15
- d) 20

Answer: c) 15

Explanation: Matches = $6C2 = 15$

7. In a tennis tournament, each of the 5 players plays against every other player once. If every player wins exactly 2 matches, how many players lose exactly 2 matches?

- a) 1
- b) 2
- c) 3
- d) 5

Answer: d) 5

Explanation: Each player plays 4 matches. If each wins 2, then each also loses 2. So all 5 lose exactly 2 matches.

8. In a tournament of 9 players, each plays every other once. What is the total number of wins recorded in the tournament?

- a) 36
- b) 45
- c) 72
- d) 81

Answer: b) 45

Explanation: Matches = $9C2 = 36$. Each match has 1 win, so total wins = 36.

9. In a chess tournament, each of 8 players plays against every other player once. If there are no draws, what is the maximum number of players that can end up winning the same number of matches?

- a) 2
- b) 3
- c) 4
- d) 7

Answer: c) 4

Explanation: With 8 players, symmetric distribution is possible. Maximum equal wins distribution = 4 players can have equal wins (balanced case).

10. In a football tournament of 10 teams, each plays against every other team once. If Team A wins 7 matches, then the minimum number of wins that Team B must have is:

- a) 0
- b) 1
- c) 2
- d) Cannot be determined

Answer: a) 0

Explanation: Team A plays 9 matches, wins 7. Team B may lose all its matches (including to A). So minimum wins for B = 0.

